

Remarks:

Claims 1, 3-6, 8-12, 14 and 16-24 are pending in the present application. Claims 1, 10 and 12 have been amended. No new matter is believed to have been added. Support for the amendments herein can be found, for example, in paragraphs 22, 23, 27, 29, 34 and 36 of applicants' U.S. Pat. Pub. No. 2003/0023669.

35 U.S.C. §103:

Claims 1, 3-6, 8-12, 14, 17, 18, 19 and 21-23 stand rejected under 35 U.S.C. §103(a) as being obvious in view of U.S. Pat. Pub. No. 2002/0129127 to Romero et al. (hereinafter, '*Romero*') in view of U.S. Pat. No. 6,006,264 to Colby et al. (hereinafter, '*Colby*'). According to the MPEP §706.02(j), to establish a *prima facie* case of obviousness, the prior art reference must teach or suggest all the claim limitations¹.

With regard to claim 1, *as amended herein*, the applicants assert that *Romero* in view of *Colby* fails to teach or suggest at least:

A method of configuring a load balancer... comprising ... obtaining a configuration file from each of said plurality of servers, wherein each configuration file is stored in a local memory of its associated one of said plurality of servers at a predefined Uniform Resource Locator (URL) ...

To the contrary, in *Romero* an agent 170 (regardless of where within the system the agent resides) is responsible for obtaining configuration parameters for the partitions/software servers 160-162. The agent then builds a partition profile 300 based upon the various obtained parameters and communicates the profile to the load balancer². The applicants respectfully assert that there is no teaching or suggestion in *Romero* that the obtained configuration parameters, the partition profile or any other configuration file for that matter, is stored at a predefined URL as recited in claim 1, as amended herein. In this regard, the only disclosure in *Romero* is that the agent 170 obtains information by probing or polling the server for metrics such as "Resource Allocation", "Resource Utilization" and "Average Response Time".

¹ See also, *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP § 2143 - § 2143.03

² paragraph 16, 32 and 33 and Fig. 1 of *Romero*.

Moreover, *Romero* teaches that the information used to build the partition profile 300 can come from numerous sources, such as by polling a partition manager 150 residing somewhere on the server, polling the operating system of the server, polling partitions/software servers, etc. As such, the applicants assert that *Romero* does not teach or suggest that any type of configuration information is stored at, and retrieved from a predefined URL.

Moreover, in making the rejection to claim 1, the Examiner argues that *Romero* teaches dispatching requests among a plurality of servers ... storing a configuration file in a local memory of each of the plurality of servers and obtaining the configuration files from each of the plurality of servers, citing the partitions/software servers (160-162), partition profile 300, and paragraphs 30, 32 and 33³.

The applicants respectfully traverse this interpretation. The partition profile 300 is a single file that accumulates partition information for a plurality of software servers/partitions 160-162. *Romero* does not teach or suggest that each of the plurality of servers 160-162 has a separate configuration file stored in a local memory thereof. Notably, the configuration file is a table of configuration information collected and assembled by the agent 170 that consolidates the configuration parameters for all the partitions/servers 160-162 into a common file as is illustrated by Fig. 3, which is reproduced herein. Note that Fig. 3 illustrates that profile information for partition IDs, A, B, C and D has been coalesced into a single partition profile.

FIG. 3

PARTITION ID	NETWORK ADDRESS	CORRESPONDING CONFIGURATION	ASSIGNED RANK
A	1.1.1.1	RESOURCE ALLOCATION ~ 20% RESOURCE UTILIZATION ~ 50% AVG RESPONSE TIME ~ 0.5 ms	3
B	1.1.1.2	RESOURCE ALLOCATION ~ 50% RESOURCE UTILIZATION ~ 55% AVG RESPONSE TIME ~ 0.2 ms	1
C	1.1.1.3	RESOURCE ALLOCATION ~ 30% RESOURCE UTILIZATION ~ 40% AVG RESPONSE TIME ~ 0.3 ms	2
...	.	.	.
PARTITION n	1.1.1.n	CONFIGURATION n	RANK n

³ Office Action mailed October 18, 2007, page 3.

However, even considering the partition profile 300 for purposes of argument, *Romero* still fails to teach or suggest that this partition profile 300 is stored in a local memory of each of a plurality of servers, regardless of whether software and/or hardware servers are considered⁴. To the contrary, the partition profile is a single file that combines and consolidates partition information that has been assembled by the agent 170.

With regard to claim 1, *as amended herein*, the applicants assert that *Romero* in view of *Colby* also fails to teach or suggest at least:

A method of configuring a load balancer... comprising
... receiving ... a corresponding configuration file formatted into a
markup language supported by the load balancer ...

In this regard, *Romero* provides no teaching or suggestion at all with regard to the format of the partition profile and moreover fails to teach or suggest that the configuration file is received in a markup language supported by the load balancer.

For example, in *Romero*, a partition manager 150 residing on a hardware server 140 monitors the resource utilization, load, etc. of the various partitions 160-162. Essentially, the partition manager 150 determines the configuration of the partitions 160-162 on the server 140, and provides the necessary configuration information to an agent 170⁵. Alternatively, the agent 170 may obtain the configuration information from the server 140 directly, such as by “probing or polling” the server 140, the partition manager 150, the operating system, individual partitions, etc. to identify the partitions 160-162 and determine the configuration thereof⁶. Regardless of whether the information is polled, probed, determined, etc., there is no teaching or suggestion of taking this information and formatting it so that when the information is received at the load balancer, it is formatted into a markup language supported by the load balancer.

⁴ paragraph 35 of *Romero*

⁵ paragraph 28 of *Romero*.

⁶ paragraphs 29 and 31 of *Romero*.

With regard to claim 1, *as amended herein*, the applicants assert that *Romero* in view of *Colby* further fails to teach or suggest at least:

A method of configuring a load balancer... comprising
... sending a request across a corresponding network from said load balancer to said next one of said plurality of servers for a corresponding configuration file using a standard network protocol request to the corresponding URL;
... receiving either a corresponding configuration file formatted into a markup language supported by the load balancer or an error message from said next one of said plurality of servers; and

In this regard, the Examiner expressly admits that *Romero* fails to teach the load balancer obtaining the configuration files from each of the plurality of servers. Rather, the Examiner relies on the teaching of the agent 170, upon an Examiner's assertion that such was "well known in the art at the time of the invention", and the teaching of *Colby*, citing col. 7, lines 4-12, col. 8, lines 19-23⁷.

The applicants respectfully traverse the Examiner's interpretation. Claim 1, as amended herein, recites that the load balancer sends a request across a corresponding network to a next one of the plurality of servers using a standard network protocol request to the corresponding URL for a corresponding configuration file. To the contrary, as noted above, there is no teaching or suggestion in *Romero* that the agent 170 obtains a configuration file for each server. Rather, the agent 170 collects the information such as by polling, probing, etc., various components, such as the operating system, the partition manager, etc. Moreover, there is no teaching or suggestion that the agent 170 uses a standard network protocol request, or that the agent 170 retrieves a configuration file from a corresponding URL for each of a plurality of servers. In this regard, it should be noted that the only disclosed configuration file taught in *Romero*, is the partition profile 300. However, it is the agent 170 that *builds* that profile, which is eventually communicated to the load balancer. Thus, *Romero* fails to teach or suggest that claimed.

⁷ See office action, page 5.

Moreover, the applicants respectfully assert that the Examiner's technical line of reasoning underlying the common knowledge basis is neither clear nor unmistakable, at least with regard to claim 1, *as amended herein*. For example, the applicants assert that it is not common knowledge to store a configuration file at a predefined URL, wherein the load balancer configures a load balancing scheme by sending a request across a corresponding network from the load balancer to a next one of a plurality of servers for a corresponding configuration file using a standard network protocol request to a corresponding URL and by receiving either a corresponding configuration file formatted into a markup language supported by the load balancer or an error message from the next one of said plurality of servers. As such, if the Examiner continues to maintain the rejection based upon common knowledge, the applicants hereby respectfully request that the Examiner support the finding with adequate evidence⁸.

Moreover, the applicants assert that *Colby* and/or *Colby* in combination with *Romero* fail to teach or suggest that recited in claim 1 as amended herein. *Colby* teaches a content-aware flow switch 110 that includes, among other components an Intelligent Content Probe (ICP) that probes servers for information not found during flow switch setup. Intelligent Content Probes on various flow switches communicate with each other to periodically send local server load and content information to neighboring content-aware flow switches⁹. This neither teaches nor suggests sending a request across a corresponding network from a load balancer to a next one of a plurality of servers for a corresponding configuration file using a standard network protocol request to a corresponding URL ... and receiving either a corresponding configuration file or an error message from the next one of the plurality of servers, as recited in claim 1 as amended herein. Notably, in *Colby*, there is no teaching or suggestion that each server stores a configuration file. Moreover, there is no teaching or suggestion in *Colby* that such a configuration file is stored at a URL. Also, *Colby* does not teach or suggest that if a configuration file is unavailable, an error message is returned to the load balancer. In this regard, *Colby* suffers the same deficiencies as *Romero* for purposes of an obviousness analysis of the claimed invention under §103.

⁸ M.P.E.P. §2144.03.

⁹ *Colby* Col. 7, lines 12-14.

Moreover, the Intelligent Content Probe taught in *Colby* does not read or return data collected into a file located at each server. Rather, in *Colby*, the Content Server Database contains data records that define specific data that is required for processing. Thus, the Intelligent Content Probe gathers the specific information it needs, presumably, by polling the specific features of that server. If, however, the Content Server Database contains all of the necessary information, e.g., where a network administrator defines the variables of the load balancing scheme and knows the information necessary to fill in the values of the variables defined in the Content Server Database with current server information for one or more servers, the Intelligent Content Probe need not visit or poll that server.

The applicants respectfully assert that *Romero* and *Colby*, whether taken separately or in combination, do not disclose, teach or suggest at least: ... obtaining a configuration file from each of said plurality of servers, wherein each configuration file is stored in a local memory of its associated one of said plurality of servers at a predefined Uniform Resource Locator (URL) ... sending a request across a corresponding network from said load balancer to said next one of said plurality of servers for a corresponding configuration file using a standard network protocol request to the corresponding URL ... and ... receiving either a corresponding configuration file formatted into a markup language supported by the load balancer or an error message from said next one of said plurality of servers ... as recited in claim 1, as amended herein. As such, the applicants assert that a *prima facie* case of obviousness under § 103(a) has not been established with respect to claim 1. Accordingly, the applicants respectfully request that the rejection under § 103(a) of claim 1 and the claims that depend there from including claims be withdrawn.

Claims 10 and 12 have been amended herein to provide recitations similar to that in amended claim 1. Accordingly, the applicants respectfully assert that the arguments presented above with respect to claim 1 apply by analogy to claims 10 and 12. Accordingly, the applicants respectfully request that the rejections under §103(a) of claims 10 and 12 and the claims that depend there from, be withdrawn.

Claims 16, 20 and 24 stand rejected under 35 U.S.C. §103(a) as being obvious over *Romero* in view of *Colby* and further in view of U.S. Pat. No. 6,286,038 to Reichmeyer et al. (hereinafter, '*Reichmeyer*'). Each of these claims are dependent upon a base claim, which the applicants assert is patentable over the cited art as set out more fully herein. Therefore, the applicants respectfully request that the rejections under §103(a) of these claims be withdrawn.

Conclusion:

For all of the above reasons, the applicants respectfully submit that the above claims recite allowable subject matter. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,

Stevens & Showalter, L.L.P.

By /Thomas E. Lees/

Thomas E. Lees Reg. No. 46,867

7019 Corporate Way
Dayton, Ohio 45459-4238
Phone: 937-438-6848
Fax: 937-438-2124

January 18, 2008